

## Water for Desert Wildlife

Unless you were born and raised in the Sahara, and your SUV is a camel, you've probably noticed that Nevada is not the wettest place on the planet. Especially during summer, precipitation is hard to come by here in the Great Basin. Only five to seven inches of water falls annually on the lower elevations of the region, and much of that is delivered during winter as snow.

This stingy rainfall translates into a scarcity of water sources and creates

tough restrictions on wildlife. A number of reptiles and small mammals get along without drinking water, but most of these little devils cheat by staying underground where it's relatively cool during the hottest daytime hours. Some, like the Townsend's ground squirrel, even "estivate" – a sort of summer hibernation – to beat the heat.

Other wildlife must have freestanding water during the hot, dry, desert months. All the large North American mammals, and most birds, need water on a daily basis. The distances animals



**Wildlife managers long ago realized development of reliable water sources is one of the most cost effective improvements that can be made to waterless habitats. This typical large-capacity guzzler uses twin 1,800 gallon tanks with built-in water troughs that accommodate all sizes and shapes of wildlife. A roof-like steel collection apron (background) fills the tanks with precipitation that falls primarily in winter.**

are willing or able to travel for water largely determines where they are able to live.

Long distance commutes to water holes is no problem for strong-flying birds like mourning doves, but ground-based birds such as chukar partridges and sage grouse

have a problem. During summer, these birds are tied to water by an invisible leash which seldom stretches more than a mile from a source.

Likewise, during hot weather, mule deer

use of habitat decreases rapidly at distances greater than a mile from water, and disappears entirely at a maximum of about five or six miles. The need of bighorn sheep for freestanding water is now widely acknowledged, and even pronghorn antelope, which have been living in arid portions of North America for eons, are dependent upon water sources during summer.

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# State Director's Column

For BLM, summer is wildland fire season. The potential for a busy fire year is largely determined by natural forces—not enough rain, too much rain, or dry lightning. This year, an exceptionally wet winter and early spring across the northern part of the state created a bumper crop of new grass. The new grass and carry-over vegetation from last year indicates a high fire potential. In southern and southeastern Nevada, precipitation was either near or below normal. High fire potential has been forecast for lower-elevation grasslands across the state, the Mt.Charleston/Spring Mountains area in Clark County, and the mountainous areas of eastern Lincoln County.

Our first challenge is to ensure that all our fire personnel, as well as our cooperators, are fully trained and their equipment is ready to respond. Fire personnel are at the same level as last year and equipment resources are nearly the same as last year, too. Our strategy is to pre-position and shift firefighting resources according to fire activity and potential. As the season progresses, we have the ability to bring in additional firefighting resources if fuel and weather conditions warrant.

Having adequate air tanker support is a concern that BLM addressed early on. We have three helicopters, four single-engine air tankers and additional air tankers available on a call-when-needed basis, pre-positioned around the state. The large air tankers are a national resource that we call in as needed.

Firefighter and public safety is our number one priority. The protection of human life is the single overriding fire suppression priority. Setting priorities among protecting communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the costs of protection. Once people have been committed to an incident, these human resources become the highest value to be protected.

It's important to recognize that the operational roles of BLM firefighters include wildland firefighting, hazard reduction, cooperative

prevention and education, and technical assistance. BLM firefighters are not trained for structural fire suppression. Structural firefighting requires specialized training and equipment that our firefighters are not prepared, or authorized, to undertake. We will, of course, assist with exterior structural fire protection activities and will do our best to protect homes and property from advancing wildfires.

If you own property that is in the wildland/urban interface, it is important to take preparations to maintain a safe defensible space. The article on page four describes ways to protect your property. When fire threatens a community, firefighters do their best, but they cannot be everywhere at the same time.

Be safe and enjoy your public lands.

—Ron Wenker

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## Establishing Reliable Water Sources in Suitable Habitat

Over the years, ingeniously simple, low maintenance devices called “guzzlers,” that collect and store water for wildlife, have evolved. Typical large-capacity guzzlers in central Nevada employ gently sloping roof-like structures called “aprons” to collect snow and rain, which is funneled into partially buried storage tanks. These storage tanks feature built-in drinking troughs that are designed to be accessible to a wide variety of wildlife.

To enhance reliability, most large-capacity guzzlers in Nevada consist of twin independent aprons supplying water to twin 1,800 gallon storage tank/drivers. This redundancy ensures that water will remain available should one side of the system develop a leak or other problem. While guzzlers are expensive, they cost about \$20,000 for a 3,600 gallon system, maintenance requirements are low and life expectancy is in excess of 20 years.

Most wildlife species visit guzzlers during the summer months, yet guzzlers are busy collecting water year-round. And a surprising amount of water it is! A typical Nevada guzzler using

twin 15 x 40 foot aprons will fill its twin 1,800 gallon tanks with slightly less than five inches of annual precipitation.

The BLM Battle Mountain Field Office, the Nevada Department of Wildlife, the Mule Deer Foundation, the Lander County Wildlife Board and Newmont Mining have been actively involved in guzzler construction in central Nevada. Last year, five large-capacity guzzlers were constructed on public lands in Lander and Eureka counties. Large capacity guzzlers have been built in Antelope Valley, Crescent Valley, Big Smokey Valley, on the Argenta Rim and on Bates Mountain.

Plans for additional wildlife guzzlers are in progress. Construction is often accomplished with volunteer labor. If you're interested in helping out, own your own shovel, or have badger ancestry, we'd love to have you.

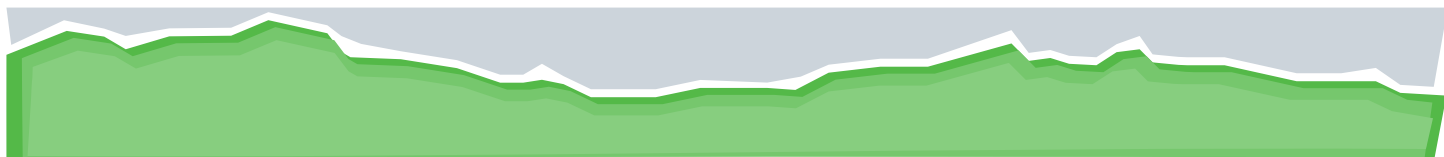
Call Mike Stamm at the BLM Battle Mountain Field Office at (775) 635- 4185.

—Mike Stamm  
Battle Mountain Field Office

**Sage grouse visit a small capacity guzzler that holds about 375 gallons of water. Smaller guzzlers serve a more limited range of wildlife. The tank resides under the apron.**



PHOTO COURTESY OF NDOW



# P R O T E C T

## Protect Your Home and Property from Wildland Fire

Dark billowing clouds of smoke and wind blowing towards your house is a frightening sight. If you have created defensible space by reducing fire hazards on your property, you have greatly improved the chances that firefighters will be able to protect your home. Defensible space provides firefighters with a buffer in which they may be able to fend off approaching fire. Buildings with defensible space stand a much greater chance of being saved than those surrounded with brush, weeds, or building materials. If firefighters are faced with a decision of which house to protect in the event of a wildfire, they may focus their efforts and sometimes limited resources on the ones that are savable.

### Key things a property owner can do to reduce their risk for wildland fire:

- Clear all weedy grasses like cheatgrass and red brome, as well as brush, from within 30 feet of houses and other structures. The 30-foot clearance will reduce the chance of a wildfire igniting your home and provide a safety zone or “defensible space” for firefighters to work.
- Keep the safety zone area lean, clean and green throughout the fire season; break up continuous layers of vegetation, and use fire resistant plants where possible.
- Make sure liquefied petroleum gas tanks have a 10-foot clearance of flammable vegetation.

- Make sure all flammable materials, including firewood, is kept away from all buildings.
- Replace wood-shake roofs with tile or composite shingles.
- Keep a connected garden hose with spray nozzle attached in case there is an accidental fire start.
- Have an evacuation plan in case wildland fire burns near your home.

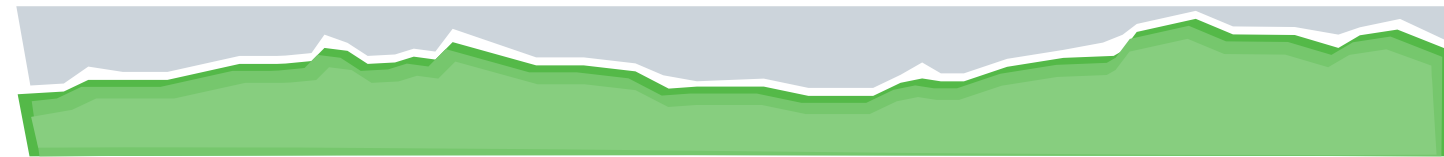
Find more ways to protect your home and property from the threat of wildfire on-line at [www.livingwithfire.info](http://www.livingwithfire.info).

### Everyone is responsible for fire safety

Fire fighting agencies and volunteer fire departments can only do so much. People must be aware of their actions and the potential consequences in times of high fire danger. Many fires are started by lightning and many are human caused. Only a small number of human-caused fires are deliberate; the vast majority are either accidental or because of carelessness.

When there are fire restrictions, please follow them, especially bans on burn barrels, open burning and campfires. Last year, Chance Fire near Elko had the potential to burn many homes. It was started by one person using a burn barrel.

—Mike Brown  
Elko Field Office



# S O W I N G T H E



**Pony Creek** – A worker with G.E. Forestry, Inc., out of Oregon, carries pinion pine seedlings up the Pony Creek drainage, 30 miles south of Carlin. More than 22,000 pinion pine seedlings were planted to replace some of the 70,000 seedlings planted in previous years that didn’t grow. Pinion pine can be difficult to establish. These seedlings are two years old and about 10 to 12 inches tall. Each tree is planted inside a biodegradable “Tree Pee” tube and surrounded by protective paper mulch to improve its chances of survival.

**Western Shoshone** – Some members of the Western Shoshone Elko Youth Group led a volunteer effort to plant 200 pinion pine seedlings and seed for bitterbrush and saltbrush on the slopes of Mount Tenabo in Mill Canyon in Crescent Valley. Desirable grass species were also planted to provide winter forage for wildlife. The 25 volunteers also included staff from Victoria Resources, a mining company, and the BLM. The youth from the Elko Band made multiple trips carrying heavy supplies up and down the steep inclines in order to plant the pinion high up the slope in an area disturbed by mining activities.



**Jackpot Schools** – Students from Jackpot schools planted 2,400 bitterbrush seedlings to help restore critical mule deer winter range habitat destroyed in the 2005 Contact fire. Jackpot Elementary School teacher Marion Oneida contacted the Nevada Department of Wildlife and the Mule Deer Foundation to see if students in the Ecology Club could help with habitat restoration. Part of the project includes a study plot of 500 seedlings that the students will return to so they can monitor the progress of the seedlings. Elko Bighorns Unlimited and the BLM Elko Field Office also participated in the planting.



# S E E D L I N G S

## Lovelock Cave:

In most years, visitors to Lovelock Cave had to use their imaginations to picture what the area must have been like when Native Americans lived along the shores of Humboldt Lake. Not this year. Because of the wet weather across northern Nevada this past winter and spring, the normally dry Humboldt Sink has temporarily metamorphosed into Humboldt Lake once again.

For three days in May, Lovelock Cave became the site of a celebration of National Public Lands Day, Nevada Archaeology Month, and the 100th Anniversary of the Antiquities Act of 1906. The event attracted more than 150 people, despite having to use a longer than usual access route because the flooding Humboldt River washed out a portion of the road.

The cooler, wetter conditions increased the amount and diversity of wildlife and plants in the area. Visitors saw many horned toads and lizards, as well as plants that had been dormant in past years.

On May 11 and 12, fourth-graders from Winnemucca and Lovelock arrived on organized field trips and participated in a wide variety of activities including a flint knapping demonstration, and guided tours of the cave and nature trail. The children received copies of the newly released Lovelock Cave Children's Activity Book.

On May 13, a tour for the general public started at Lovelock's Marzen House Museum and proceeded along unflooded sections of the Lovelock Cave Back Country Byway to the cave. Volunteers helped with sign repair, site clean up, brochure box installation, and trail repair and maintenance activities.

An unexpected highlight of the event occurred as BLM Winnemucca archaeologist Peggy McGuckian was speaking to a group at the cave.



{MIDDLE PHOTO} Participants in the Lovelock Cave National Public Lands Day/Nevada Archaeology Month/Antiquities Act 100th Anniversary Celebration gather in the parking lot below the cave. Humboldt Lake, temporarily restored to its past grandeur by heavy flows in the Humboldt River, dominates the background.

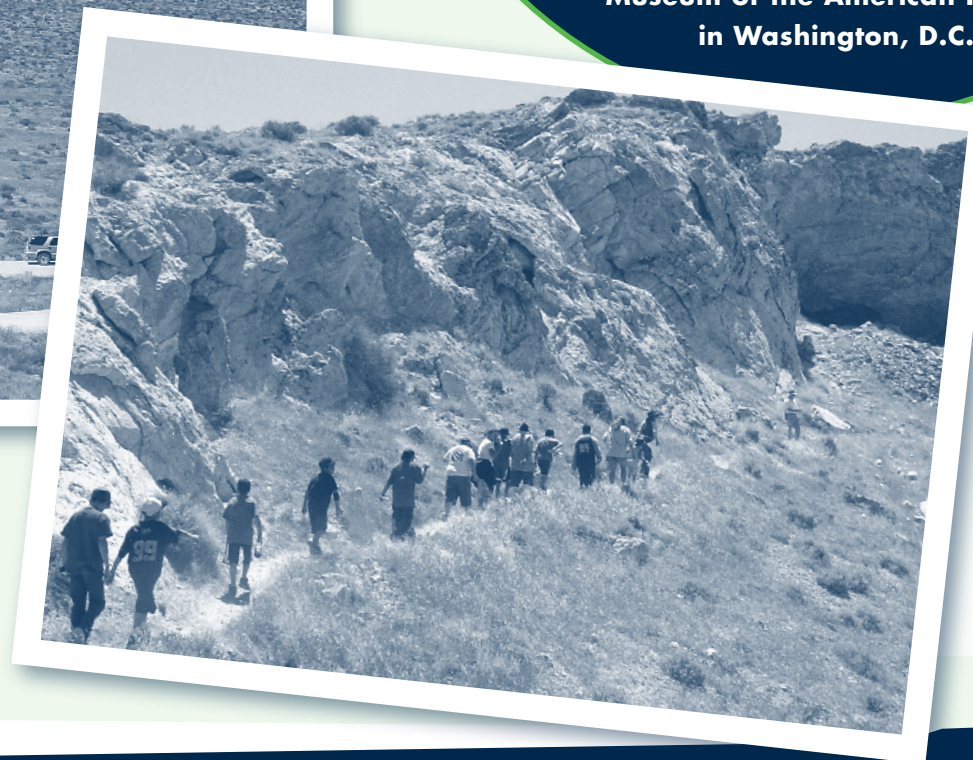
## Window to the Past

Everyone in the group started ooing and ahing. A young owl perched near her on a rock and stole the show!

Lovelock Cave is one of the nation's archaeological jewels. Everyone who visits leaves with a greater appreciation of the area's long human history and a better understanding of the ecology of today's Great Basin.

—Jamie Thompson  
and Peggy McGuckian  
Winnemucca Field Office

**Lovelock Cave was placed on the National Register of Historic Places in 1984 because it is a key to understanding our nation's past and present. Archaeologists excavated the cave intermittently between 1912 and the 1970s, removing thousands of artifacts. Because its interior is dry and protected from the weather, Native American people used the cave for thousands of years to store perishable items and other artifacts. The time of most intensive use, known as the Lovelock Period, was between about 2,000 B.C. and 1,000 A.D. Perhaps the most famous artifacts removed from the cave are a cache of duck decoys made 2,000 years ago of bulrush (tule) and cattail leaves. These are the oldest duck decoys ever found anywhere on Earth. Three of the decoys belong to the Smithsonian and are on display at the Museum of the American Indian in Washington, D.C.**



{TOP LEFT} Fourth-graders from Winnemucca gather in the shade of a kiosk at the Lovelock Cave Interpretive Site.

{BOTTOM RIGHT} Guided group of students walk up the path to the cave entrance.

# CELEBRATE THE

## National Public Lands Day

Volunteerism is a rewarding way for people across America to ensure the safety and perpetuation of the public lands we all enjoy. The 13th Annual National Public Lands Day (NPLD) will be Sat., Sept. 30, although not all of the events will be held that day. Check the date for the event you are interested in attending. Participating in an NPLD event is a great way to help your community while making new friends and getting involved. This year is the Centennial of the Antiquities Act. Some of the NPLD events will also celebrate 100 years of protection of heritage resources on public lands.

All volunteers are welcome to join the fun at six upcoming events. Projects include many different tasks, such as: building walking paths, installing interpretive exhibits and seeding and installing live plants. Some of the events offer Leave No Trace, Tread Lightly, Backyard Biology and environmental programs for children. Participants at one of the Las Vegas events can meet a desert tortoise.

### Winnemucca: Black Rock Desert – High Rock Canyon Emigrant Trails National Conservation Area

**Saturday and Sunday, September 30 and October 1**

Protect sensitive natural and cultural resources of the High Rock Canyon.

**Area of Critical Environmental Concern:** Gates and information signs will be placed at each end of High Rock Canyon to implement a seasonal closure and to provide important use information. Walking paths will be constructed to improve access to interpretive information.

A barbecue and potluck dinner, as well as a campout, will be hosted by the partner groups on Saturday. There will be a guided hike on Sunday, Oct. 1 following the event. Childrens' programs will be provided.

There is a need for a historic building restoration expert to help with project planning. A building in the Black Rock was recently listed on the National Historic Register and needs to be stabilized and restored.

**Contact: Jamie Thompson, (775) 623-1503 or  
jamie\_thompson@nv.blm.gov**

### Caliente: Ruin Wash Trilobite Site

**Wednesday, September 27**

The collection of trilobite fossils over the years has left extensive waste piles and dangerous pits. Work will be done at Ruin Wash Trilobite Site to re-contour the area and install interpretive exhibits. This will create a safer environment for those wanting to learn more about the area and trilobites. Volunteers will be able to learn about paleontology, archaeology, mine safety, and Leave No Trace ethics.

**Contact: Chris Hanefeld, (775) 289-1842 or  
chris\_hanefeld@nv.blm.gov**

### Las Vegas: Desert Tortoise Conservation Center Management Area

**Saturday, September 30**

This facility in southwestern Las Vegas has received an increased rate of illegal dumping as city expansion grows steadily closer. There are about 22 separate dump sites throughout the area including at least nine abandoned vehicles. The presence of trash attracts illegal target shooting and promotes additional dumping. The area will be cleaned of trash to help protect the conservation area from future dumping and protect people from potential injuries from illegal target shooting.

Prior to clean-up activities, a program about desert tortoise will be conducted to educate participants on the legal protection, physical and behavioral characteristics of the desert tortoise and ways the public can help minimize impacts to the species. Live desert tortoises will be used for demonstration.

**Contact: Kirsten Cannon, (702) 515-5057 or  
kcannon@nv.blm.gov**

### Las Vegas: Red Rock Canyon National Conservation Area, Lee Canyon

**Saturday, September 16**

Help clean up an illegal shooting range and camp sites along a quarter-mile long dirt road that will be closed by the end of the day. Volunteers will help remove debris and restore the road and

# LAND

## (continued...)

campsites, after the ground has been ripped. Restoration will involve mulching, planting seeds and plants, placing barricades and putting up road closure signs. Volunteers will learn Leave No Trace ethics.

**Contact: Kirsten Cannon, (702) 515-5057 or  
kcannon@nv.blm.gov**

### Ely: Nevada Northern Railway and surrounding public land locations

**Saturday, September 30**

Work will help maintain and improve the facilities, trails and signs for recreation near and around the Nevada Northern Railway. Volunteers will have the opportunity to participate in Leave No Trace and Backyard Biology programs.

**Contact: Chris Hanefeld, (775) 289-1842 or  
chris\_hanefeld@nv.blm.gov**

### Carson City: Sand Springs Pony Express Station & Pony Express Trail

**Saturday, September 16**

Large drifts of sand have blown into the historic Sand Springs Pony Express Station and buried many of the walls. Some rocks from the walls have fallen and vegetation has grown up both inside and around the structure, including on the walls themselves. Restoration will include mucking out the sand that has accumulated inside the station, removing vegetation, restacking fallen rocks from the walls, cleaning and restoring interpretive signs, constructing a new trail register box, picking up trash and marking several miles of the Pony Express National Historic Trail. Volunteers will get a tour of the Pony Express Stations, information about the Leave No Trace and Tread Lightly programs, and brochures about the Sand Springs Pony Express.

**Contact: Mark Struble, (775) 885-6107 or  
mstruble@nv.blm.gov**

—Helyse Sina  
Nevada State Office

## Carlin Canyon Gets a Makeover



BLM PHOTO BY KRISTINE DEDOLPH

Volunteer John Boykin (LEFT); Kirk Sommer, (CENTER) president of the Ruby Mountain Rios chapter of the National Wild Turkey Federation; and Pike Boyles, (RIGHT) also with the National Wild Turkey Federation, place a protective cage around a newly planted cottonwood tree. The Turkey Federation adopted the National Public Lands Day project and provided funding for many of the trees.

Volunteers along the Humboldt River gave the Carlin Canyon area the face lift it needed. The canyon didn't get Botox or plastic surgery. Instead, 45 volunteers and BLM employees spruced up Carlin Canyon by planting 50 cottonwood trees, removing trash and eliminating hundreds of Scotch thistle plants.

"This year the National Wild Turkey Federation 'adopted' our project and they supplied funding for a large portion of the trees," said Tom Warren, BLM Elko Field Office National Public Lands Day coordinator. Local Girl Scout and Boy Scout troops, the Back Country Horsemen of Nevada and a Nevada Youth Training Center crew were among other organizations that helped with the May 13 event.

BLM weed specialists sprayed noxious weeds and volunteers from the Nevada Youth Training Center built fences to protect the newly-planted trees. After the work was finished, volunteers partook of a hearty Dutch-oven lunch prepared by Bill Roach, BLM Elko's interagency dispatch center supervisor.

So how exactly do you give a canyon a face lift? Well, by pulling weeds and planting trees.

—Helyse Sina  
Nevada State Office

# HOOVES & WHEELS

## Three New Marines

Marines from the U.S. Marine Corps Mounted Color Guard ride three palomino wild horses they adopted at the June 3 saddle horse adoption at the Warm Springs Correctional Facility in Carson City. The Mounted Color Guard, based in Barstow, Calif., began adopting wild horses from the BLM in 1988 and has since developed an entire unit of palomino wild horses. These three horses are the first ones the Marines adopted already saddle trained.



## Mountain Bike Race

The first annual Fears, Tears, & Beers mountain bike race ran in June near Ely. The event was sponsored by the Great Basin Trails Alliance, a non-profit organization based in Ely that is devoted to trail recreation. The Ely area offers outstanding opportunities for trail recreation. The 17-mile beginner loop, 26-mile sport loop, and 34-mile expert loop were all on existing trails on BLM, Forest Service and City of Ely lands in the Ward Mountain area.

PHOTO COURTESY OF GREAT BASIN TRAILS

# MAKING A DIFFERENCE

## Yerington Man Receives “Making a Difference” Award

Chuck Worley, chairman of the Friends of Wilson Canyon, is one of eight winners this year for the Making a Difference National Volunteer Award. Worley formed Friends of Wilson Canyon three years ago to help the BLM and the Forest Service manage this scenic canyon recreation area.

The Friends of Wilson Canyon are dedicated to public land stewardship and the protection of recreation access to public lands. Since 2003, they have contributed more than 800 hours of volunteer labor, and \$12,000 worth of materials, tools and heavy equipment to install railroad ties and boulders to manage off-highway vehicles (OHV) and informational signs in Wilson Canyon.

The Wilson Canyon Recreation Area is on public land adjacent to the West Walker River and Highway 208 near Yerington. The scenic river canyon provides easily accessible fishing and camping opportunities year-round. Canoeing and other water activities are attractive during the hot summer months. The adjacent hills are popular for hiking, horseback riding and OHV activity particularly for novice motorcycle and all-terrain vehicle (ATV) riders and family groups.



Chuck Worley pounds a carsonite sign in the ground at the Wilson Canyon Recreation Area.

Worley recognized that increasing popularity and recreational demands were visibly affecting the natural resources in the canyon, which could diminish future recreation uses. To avoid possible protective land closures, he initiated on-site awareness meetings with the Forest Service, BLM, Lyon County and local residents. Then he initiated volunteer action by organizing clean-ups, applying for and being awarded Recreation Trails Grants, and participating in the development of long-term management of the area. The Friends of Wilson Canyon grew out of these efforts. Worley also created and maintains a Friends of Wilson Canyon web site. Through the website and informational brochures, he is

keeping the public informed and involved in what is going on at Wilson Canyon.

Worley and the other national award winners, were honored in May in Washington, D.C. His award was presented by BLM Nevada Associate State Director Amy Lueders.

—Debra Kolkman  
Nevada State Office



Winter and spring run-off washed out the Robinson Creek crossing on BLM Road 1099 near Jiggs, limiting access to a ranch and gold exploration activities in the area. Grandview Gold funded the repair, which was done by Legarza Exploration and Construction. BLM provided culverts, pipes and end sections. The 48-inch washed out culvert was replaced with two 48-inch corrugated metal pipe arches with flared-end sections. The new pipes are sized to handle a flow 25 percent greater than the large water event that took out the old crossing. Soils saturated by snow and rain, combined with heavy run-off from melting snow at higher elevations, led to washouts and high water closings on numerous rural roads across the northern part of the state.

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